



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,790	09/27/2001	Mike Farwick	32301WD230	9133

7590 05/18/2005  
SMITH, GAMBRELL & RUSSELL, LLP  
SUITE 800  
1850 M STREET, N.W.  
WASHINGTON, DC 20036

EXAMINER

KERR, KATHLEEN M

ART UNIT PAPER NUMBER

1652

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/963,790

Applicant(s)

FARWICK ET AL.

Examiner

Kathleen M. Kerr

Art Unit

1652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 February 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5,9,12,34,35,37,38,40,42-49 and 51-54 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☒ Claim(s) 5,9,12,34,35,37,38,40,42-48 and 51-54 is/are allowed.  
6) ☒ Claim(s) 49 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 27 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Application Status***

1. In response to the previous Office action, a non-final rejection (mailed on November 18, 2004), Applicants filed a response and amendment received on February 15, 2005. Said amendment amended Claims 38, 40, 45, 47, and 49, cancelled Claims 32-33 and 36 and added new Claims 53-54. Thus, Claims 5, 9, 12, 34, 35, 37, 38, 40, 42-49, and 51-54 are pending in the instant Office action and will be examined herein.

### ***Priority***

2. As previously noted, the instant application is granted the benefit of priority for the foreign application 100 47 865.4 filed in Germany on September 27, 2000. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which papers have been placed of record in the file. A translation of said priority document has been received.

### ***Withdrawn - Claim Objections***

3. Previous objection to Claim 33 under 37 C.F.R. § 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim is withdrawn by virtue of Applicant's cancellation of said claim.
4. Previous objection to Claim 44 as depending from a rejected claim is withdrawn.

***Withdrawn - Claim Rejections - 35 U.S.C. § 112***

5. Previous rejection of Claims 40, 43, (45) and 46-48 (and 51-52) under 35 U.S.C. § 112, second paragraph, as being indefinite for the phrase “**consisting of at least** 18 consecutive nucleotides” (emphasis added) is withdrawn by virtue of Applicant’s amendment.
6. Previous rejection of Claims 38, 43 and 51-52 under 35 U.S.C. § 112, second paragraph, as being indefinite for closed language is withdrawn by virtue of Applicant’s amendment.
7. Previous rejection of Claim 49 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for closed language is withdrawn by virtue of Applicant’s amendment.
8. Previous rejection of Claim 49 under 35 U.S.C. § 112, second paragraph, as being indefinite for unclear alternative claim language is withdrawn by virtue of Applicant’s amendment.
9. Previous rejection of Claims 30, 31, 36, 38, and 49 under 35 U.S.C. § 112, first paragraph, scope of enablement, is withdrawn by virtue of Applicant’s amendment.

***Maintained - Claim Rejections - 35 U.S.C. § 112***

10. Previous rejection of Claim 49 under 35 U.S.C. § 112, first paragraph, new matter, is maintained. Applicant’s arguments have been fully considered but are not deemed persuasive for the following reasons.

“Claim 9 has been indicated as being allowed. Moreover, the specification teaches how to transform a bacterium, such as *E. coli*, with a polynucleotide. See pages 8-9. Hence, Applicants submit that when the specification is taken as a

Art Unit: 1652

whole, those of ordinary skill in the art would readily recognize that claim 49, as it depends from claim 9, is adequately described in the specification as originally filed and thus does not constitute new matter. Accordingly, withdrawal of this rejection is requested.”

The Examiner notes that the only place that generic host cells include *E. coli* in the specification is in the Examples and on pages 8-9 of the specification. Pages 8-9 describe as follows:

“To isolate the *deaD* gene or also other genes of *C. glutamicum*, a gene library of this microorganism is first set up in *Escherichia coli* (*E. coli*).”

Thus, only fragments of *C. glutamicum* genes (SEQ ID NO:1 and its fragments) are described in *E. coli*. The scope of any gene that encodes SEQ ID NO:2 is broader than *C. glutamicum* genes specifically. Since no generic mention of host cells or *E. coli* host cells (all mention of host cells is limited to coryneform) is found in the specification, Claim 49, as it depends from Claim 9, is not supported in the specification as originally filed.

### ***Summary of Pending Issues***

11. The following is a summary of the issues pending in the instant application:

a) Claim 49 stands rejected under 35 U.S.C. § 112, first paragraph, new matter.

### ***Allowable Subject Matter***

12. As previously noted, the closest prior art to the *C. glutamicum* RNA helicase, *deaD*, gene claimed in the instant application is that of *deaD* genes from *M. tuberculosis* and *K. pneumoniae* (see IDS for citations). These DNAs encode proteins that are 52% and 45% identical to SEQ ID NO:2, respectively. Exactly SEQ ID NO:1 (Claims 5, 34, 35, and 37) and any DNA encoding

SEQ ID NO:2 (Claim 9) as well as related products (Claims 38, 49, 51, and 52) and specific vectors (Claims 12, 44) are free of the prior art.

***Conclusion***

13. Claims 5, 9, 12, 34, 35, 37, 38, 40, 42-48, and 51-54 are allowable, and Claim 49 is rejected for the reasons identified in the numbered sections of this Office action. Applicant must respond to the objections/rejections in each of the numbered sections in this Office action to be fully responsive in prosecution.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 C.F.R. § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathleen M. Kerr whose telephone number is (571) 272-0931. The examiner can normally be reached on Monday through Friday, from 9:00am to 6pm.

Art Unit: 1652

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathupura Achutamurthy can be reached on (571) 272-0928. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kathleen M Kerr  
Primary Examiner  
Art Unit 1652

May 16, 2005